April 22, 2005

Mr. J. A. Stall
Senior Vice President, Nuclear and
Chief Nuclear Officer
Florida Power and Light Company
P.O. Box 14000
Juno Beach, Florida 33408-0420

SUBJECT: TURKEY POINT, UNITS 3 AND 4 - REPLY TO LICENSEE RESPONSE TO NUCLEAR REGULATORY COMMISSION BULLETIN 2003-02, "LEAKAGE FROM REACTOR PRESSURE VESSEL LOWER HEAD PENETRATIONS AND REACTOR COOLANT PRESSURE BOUNDARY INTEGRITY" (TAC NOS. MC0572 AND MC0573)

Dear Mr. Stall:

On August 21, 2003, the Nuclear Regulatory Commission (NRC) issued NRC Bulletin 2003-02, "Leakage from Reactor Pressure Vessel Lower Head Penetrations and Reactor Coolant Pressure Boundary Integrity," to the industry. This bulletin informed addressees that current methods of inspecting the reactor pressure vessel (RPV) lower heads may need to be supplemented with bare-metal visual (BMV) inspections in order to detect reactor coolant pressure boundary leakage. The bulletin also requested addressees to provide the NRC with information related to inspections that have been performed to verify the integrity of the RPV lower head penetrations.

The bulletin requested a description of the RPV lower head penetration inspection program that would be implemented at their respective plants during the next and subsequent refueling outages. This description was to include the extent of the inspection, the inspection methods to be used, the qualification standards for the inspection methods, the process used to resolve the source of findings of boric acid deposits or corrosion, the inspection documentation to be generated, and the basis for concluding that their plant satisfied applicable regulatory requirements related to the structural and leakage integrity of the RPV lower head penetrations.

By letter dated September 19, 2003, Florida Power and Light Company (FPL) provided its response to this request. FPL committed to perform a BMV examination of all 50 RPV lower head penetrations, including 100 percent of the circumference of each penetration as it enters the RPV lower head, during the fall 2004 and fall 2003 refueling outages at Turkey Point (TP), Units 3 and 4, respectively.

By letter dated September 19, 2003, FPL had originally committed to performing BMV examinations of all 50 RPV lower head penetrations, including 100 percent of the circumference of each penetration as it enters the RPV lower head, during subsequent refueling outages beyond the fall 2004 and 2003 refueling outages at TP, Units 3 and 4. However, in its letter dated July 27, 2004, FPL changed its commitment for the fall 2004 and spring 2005 refueling outages at Units 3 and 4, respectively. Specifically, FPL elected to perform ultrasonic testing

(UT) examinations of the RPV lower head penetrations instead of BMV examinations. FPL's plan to perform BMV examinations in subsequent outages beyond fall 2004 at Unit 3 was not affected by this commitment change. The examination scope for subsequent refueling outages beyond the spring 2005 refueling outage at Unit 4 will continue to include BMV exams of all 50 RPV lower head penetrations. FPL intends to modify its boric acid inspection program at TP to include VT-2 BMV examination of the RPV lower head penetrations at a frequency determined by the Electric Power Research Institute Materials Reliability Program, American Society of Mechanical Engineers Code changes, or regulatory action. As such, FPL is requested to notify the NRC staff in writing of any additional changes to this commitment prior to implementation.

The bulletin also requested that addressees provide a summary of the RPV lower head penetration inspection that was performed at their plants, the extent of the inspection and the methods used, a description of the as-found condition of the lower head, any findings of relevant indications of through-wall leakage, and a summary of the disposition of any findings of boric acid deposits and any corrective actions taken as a result of indications found.

On December 19, 2003, FPL provided a summary of the inspection results for Unit 4. The summary indicated that a BMV examination was performed of 100 percent of the circumference of each of the 50 RPV lower head penetrations where they enter the RPV lower head. FPL did not observe any evidence of RPV lower head material wastage or RPV lower head penetration leakage.

On January 27, 2005, FPL provided a summary of its inspection results for Unit 3. The summary states that UT examination was performed on each of the 50 RPV lower head penetrations. The examination included the volume of nozzle base material extending from a plane at least 2 inches below the lowest point of the weld root, to a plane at least 2 inches above the highest point of the weld toe, consistent with the NRC Order for examination of the control rod drive mechanism nozzles. FPL did not observe any service induced or crack-like indications that would lead to pressure boundary leakage.

Based on its review of FPL's responses to NRC Bulletin 2003-02, the NRC staff finds that TP has met the reporting requirements of the bulletin.

Sincerely,

/RA/

Eva A. Brown, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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The bulletin also requested that addressees provide a summary of the RPV lower head penetration inspection that was performed at their plants, the extent of the inspection and the methods used, a description of the as-found condition of the lower head, any findings of relevant indications of through-wall leakage, and a summary of the disposition of any findings of boric acid deposits and any corrective actions taken as a result of indications found.

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Based on its review of FPL's responses to NRC Bulletin 2003-02, the NRC staff finds that TP has met the reporting requirements of the bulletin.

Sincerely,

/RA/

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TURKEY POINT PLANT

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